ABSTRACT

An oriented polyimide film with a high Young's modulus, satisfactory moist heat resistance and low moisture absorptivity, and a process for its production. The polyimide film is composed mainly of a pyromellitic acid component, with a p-phenylenediamine component at between 30 mole percent and 99 mole percent and a diamine component represented by the structural unit of the following formula (II) at between 1 mole percent and 70 mole percent:

$$-N = N - Ar^{Ila} - X - Ar^{Ilb} - (II)$$

(wherein Ar^{IIa} and Ar^{IIb} are each independently a C6-20 aromatic group optionally having an non-reactive substituent, and X in structural unit (II) consists of at least one group selected from among -O-, -O- Ar^{IIc} -O-, -SO₂- and -O- Ar^{IId} -O- Ar^{IIe} -O-), and the polyimide film is characterized by having two perpendicular directions in which the in-plane Young's modulus is 3 GPa or greater, and having a moisture absorptivity of no greater than 3.3 wt% at 72% RH, 25°C.